

**STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

Attachment No. 1

Page 1 of 2

PROPOSED STATE STANDARD,
TITLE 8, CHAPTER 4

Amend Section 770 to read:

§770. Boilers Subject to Annual Inspection.

(a) All boilers subject to these ~~Orders~~ are subject to annual internal and external inspection, except as provided in subsection (b), and except those boilers exempted from annual inspection in ~~Order~~ Section 771.

(b) Boilers installed in turboelectric plants in such a manner that each boiler furnishes steam to a single turbine only shall be inspected internally at least once each eighteen (18) months. The permit to operate issued following internal inspection shall expire not more than twelve (12) months after the date of inspection. The boiler shall be externally inspected prior to or on the expiration date of the permit by a qualified inspector who may, if conditions warrant, issue a temporary permit which shall expire not more than six (6) months after the date of external inspection. A copy of the external inspection report shall be forwarded to the Division by the qualified inspector. Such report shall show the expiration date of the temporary permit to operate.

The Division, upon individual application from petroleum companies, chemical plants, public utilities or other industries considered by the Division as having superior preventive maintenance and examination programs, may grant a maximum interval of ~~twenty-four (24)~~ thirty-six (36) months between internal inspection of fired boilers. A fired boiler is defined for this ~~order~~ section as one whose temperature input can cause metallurgical damage to the boiler, or whose combustion of fuel can cause a furnace explosion. For boilers other than fired boilers, the Division may grant a maximum interval of ~~thirty-six (36)~~ seventy-two (72) months between internal inspections, provided the temperature input cannot cause metallurgical damage. Boilers of the latter type are typically called process steam generators. Such applications, to be reviewed by the Division, shall contain as a minimum the following information and proposals:

(1) The history of the unit (or of a similar installation) that shows that there is no significant deterioration from scaling, corrosion, erosion or overheating.

(2) Wall thickness reference points shall be established. Following internal inspection of each boiler, a complete record showing the total corrosion and any other conditions found which need correction at the time of inspection shall be forwarded to the Division as part of the inspection report required by 774(a)(1). This record shall show the location and extent of any corrosion, erosion or other defects noted, and shall be verified and signed by the certified inspector making the inspection required by ~~Safety Order~~ Section 770(a).

(3) The "Permit to Operate" shall expire one (1) year from the date of the internal inspection, or the date of startup if so noted on the inspection report and the "Permit to Operate." Prior to or on the expiration date of this "Permit," ~~the boiler shall be inspected externally by a certified inspector, who will review the operating logs and water treatment records, shall inspect the boiler externally.~~ If conditions warrant, the certified inspector may issue a temporary permit not to exceed six (6) months. Prior to or on the expiration date of the second permit, the boiler shall

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Attachment No. 1

Page 2 of 2

PROPOSED STATE STANDARD,
TITLE 8, CHAPTER 4

again be inspected externally by a certified inspector; if conditions warrant, a "Permit" may be issued for an additional six (6) months.

Boilers operating longer than twenty-four (24) months between internal inspections shall have a program of on-stream examination of corrosion points, and inspection of operations and safety controls that is acceptable to the Division, and the certified inspection agency. The maximum interval of each temporary permit shall be six (6) months.

If the boiler is located within a local jurisdiction that has regulations concerning boiler inspections, the jurisdiction must also be consulted concerning the acceptability of the inspection program.

The certified inspector shall submit reports to the Division of each external inspection, noting the expiration date of the permit issued, and recording any unusual condition found. The inspection report shall include a statement that water treatment records have been reviewed. Reports of on-stream wall thickness readings must also be submitted to the Division via the certified inspector.

(4) For boilers and process steam generators where metallurgical damage may occur, the Division may categorize the boiler or process steam generator as unfired upon acceptance of a risk engineering analysis submitted by the owner of the boiler to the Division. The risk engineering analysis shall include the design basis for categorizing the boiler as unfired, the potential consequences to the boiler and to the safety of the person(s) responsible for attending the boiler, and a discussion of protective devices and specific procedures to prevent the consequences.

~~(4)~~(5) The boiler water treatment and specific chemical limits shall be prescribed by a competent water treatment specialist, such as a chemical engineer. The boiler water chemistry shall be maintained within desirable limits and documentary records shall be kept of the tests and methods used to maintain the water chemistry within the prescribed limits. A summary of weekly test results shall be kept, and the records shall be available to the certified inspector.

~~(5)~~(6) A copy of the Division letter granting the longer interval between internal inspections shall be posted near the boiler, the boiler control center, or the process unit control room.

NOTE: Authority cited: Section 142.3 and 7682, Labor Code. Reference: Section 142.3 and 7682, Labor Code.